SEQUENCE LISTING

<110> Tsang et al.

<120>   METHODS AND COMPOSITIONS FOR DETECTING LARVAL TAENIA SOLIUM

<130>   6395-62068

<140> 10/048,146
<141> 2000-08-03

<150> US 60/147,318
<151> 1999-08-03

<150> PCT/US00/21173
<151> 2000-08-03

<160> 9

<170> PatentIn version 3.1

<210> 1
<211> 2153
<212> DNA
<213> Taenia solium

<220>
<221> CDS
<222> (145)..(531)
<223>

<400> 1
ctgcagtgaa gttgacaagt agttgaccat ttacggaaca tcaatggagg acactttggt   60

agggaaagca tacgataaac ataaaccaat gctggttata taagagacga tctcggctac   120

acttgtaact gaacaacctg taga atg cgt gcc tac att gtg ctt ctc gct   171
                          Met Arg Ala Tyr Ile Val Leu Leu Ala
                           1   5

ctc act gtt ttc gta gtg acg gtg tcg gcc gag tgg gtg ccc att tcg   219
Leu Thr Val Phe Val Val Thr Val Ser Ala Glu Trp Val Pro Ile Ser
 10   15   20   25

agt gtc cac ata gcc tca tgc aaa agc cac tac atg ttc caa tta aaa   267
Ser Val His Ile Ala Ser Cys Lys Ser His Tyr Met Phe Gln Leu Lys
                 30   35   40

cgc ttt ttt gcc ttt agg aaa aac aaa ccg aaa gat gtt gca aat agt   315
Arg Phe Phe Ala Phe Arg Lys Asn Lys Pro Lys Asp Val Ala Asn Ser
                 45   50   55

acg aaa aaa ggg ata gaa tat gtc cac gaa ttc ttc cac gaa gac ccg   363
Thr Lys Lys Gly Ile Glu Tyr Val His Glu Phe Phe His Glu Asp Pro
             60   65   70

1

```
att ggt aaa caa att gct caa ctc gca aag gaa tgg aag gaa gca atg          411
Ile Gly Lys Gln Ile Ala Gln Leu Ala Lys Glu Trp Lys Glu Ala Met
    75                  80                  85

ttg gaa ggt agg ttt tgg tgt ttt ctg tca gaa gaa aat tat cta ttc          459
Leu Glu Gly Arg Phe Trp Cys Phe Leu Ser Glu Glu Asn Tyr Leu Phe
90                  95                  100                 105

att cat cta gac aaa ggc aaa ata cgg acg tca ctg gtt gag cac tgc          507
Ile His Leu Asp Lys Gly Lys Ile Arg Thr Ser Leu Val Glu His Cys
                110                 115                 120

aaa ggt cct aag aaa aaa act gct taacttgtca actttcatgc gttcttctct         561
Lys Gly Pro Lys Lys Lys Thr Ala
                125

tcactaataa atgctcatta ataagaaagc tgccttttgc aagatcaacg agggccatag        621

actgtgaggg ttatagccta aggttatggg gtgaaatgag ataggaattg agcatttgag        681

aagttactaa tttaaattga aagccgcatt cttctgcaa ttgacgtgtg atggttagcg         741

aaaccaagtg aagcacgacc tcttgagtcg tttcaacagc cgccagtggt ttcaccagtg        801

gcttcaccag tgggtagact ggtttgtcac acatgcgagg tacggtcaga gggctaacag        861

gtgtggtgga ggggccaaca cgtgtaagac aagcagttcc ccttctctgt cgtgaggcac        921

actcagcacc cacctcgttt acttctccct tgacgactgt aatgcatttg gggtcaccat        981

gcccccgcca agttgaaggc actgatgaca tttgtaccat atcaccgata agtattaact       1041

cttccacttc ccagattttg aggtcaggcg atcctactga ctcggtgtag ccccatggtg       1101

gtccatgctc tgcaccattc gctgttcagt ggagcatcca cctagacggc caaccaatct       1161

cgcctccctt ctcctgtgct caagatgtgc gtcggtgaga tttggagggt ctgatcacca       1221

tactaaccac gtaggtttca tcatctctaa gaagcaccac ttcttgaggt cgcattgtgt       1281

accaccagcc ggtgtaatca agagtgactt tcgcgtcacc cctaagaagg ctatagatct       1341

gcaagtcagc gcaatagctt cagccatgct gactaaaatg tgtaagggac cagtagctct       1401

agcccaacac aagtggagct aataatgggc ttccccagat acatgaatcc caaatcggtg       1461

agcatgggcc atgaatatgg ccttctgagt cttccttgaa tgcaaacgaa ggcatagcac       1521

gagggtagga tgagtgtaca gaaaacagcg aggcaacgaa tctactggca tggccctgat       1581

gccacccgc ccagctaggg tagtttggcc acctcagtcc ttaatcgaat gcggcagtca        1641

gaacaaacaa agtattacat agccacactc ttcttttgag cgtcgtcctc gacgctcctt       1701

tcgacacacc tcccgcatca gccaccacaa agtaatcagt actggggaga cacccacgag       1761
```

```
ctaaccgtgc cagtcatgga aaatttgacg gcaactgagg agatgcctga ccccctttgg      1821

cagttcgaat gctgcccgtg gtcaaactcc tgcatcagcc atcacctacg attcaaacat      1881

cctagtcgcc aaattttcgt gaaccctcta aaattttcgt gcactctcaa gacacttcca      1941

actgacttag agctttttca tttggtgaga acacgtaaaa gcttcaagta aacaacaggc      2001

aacgatttca ctttgatgct ctcaccatca attctcttgt atgtgccacc accttaaacc      2061

ctccctgacc acttccactc tctctctctc cctaaataac aacacttgga agcatgaatg      2121

gtgtctgtca aagttacacc cctagactgc ag                                   2153
```

<210> 2
<211> 129
<212> PRT
<213> Taenia solium

<400> 2

```
Met Arg Ala Tyr Ile Val Leu Leu Ala Leu Thr Val Phe Val Val Thr
1               5                   10                  15


Val Ser Ala Glu Trp Val Pro Ile Ser Ser Val His Ile Ala Ser Cys
            20                  25                  30


Lys Ser His Tyr Met Phe Gln Leu Lys Arg Phe Phe Ala Phe Arg Lys
            35                  40                  45


Asn Lys Pro Lys Asp Val Ala Asn Ser Thr Lys Lys Gly Ile Glu Tyr
    50                  55                  60


Val His Glu Phe Phe His Glu Asp Pro Ile Gly Lys Gln Ile Ala Gln
65                  70                  75                  80


Leu Ala Lys Glu Trp Lys Glu Ala Met Leu Glu Gly Arg Phe Trp Cys
                85                  90                  95


Phe Leu Ser Glu Glu Asn Tyr Leu Phe Ile His Leu Asp Lys Gly Lys
                100                 105                 110


Ile Arg Thr Ser Leu Val Glu His Cys Lys Gly Pro Lys Lys Lys Thr
            115                 120                 125


Ala
```

3

<210> 3
<211> 298
<212> DNA
<213> Taenia solium

<220>
<221> CDS
<222> (3)..(224)
<223>

<400> 3
ta ttc gta gtg gcg gtt tcg gcc gag aaa aac aaa ccg aag tgt gat   47
   Phe Val Val Ala Val Ser Ala Glu Lys Asn Lys Pro Lys Cys Asp
   1   5   10   15

gca aat agt act aag aaa gag ata gaa tat atc cac aat tgg ttt ttc   95
Ala Asn Ser Thr Lys Lys Glu Ile Glu Tyr Ile His Asn Trp Phe Phe
                20   25   30

cat gat gac ccg att gga aaa caa att gct caa ctc gca aag gac tgg   143
His Asp Asp Pro Ile Gly Lys Gln Ile Ala Gln Leu Ala Lys Asp Trp
            35   40   45

aat gaa aca gtg cag gaa gcc aaa ggc aaa ttt tgg gcg tca ctg gct   191
Asn Glu Thr Val Gln Glu Ala Lys Gly Lys Phe Trp Ala Ser Leu Ala
        50   55   60

gag tac tgc aga ggt ctg aag aac aaa act gct taacttgtca actttcatgc   244
Glu Tyr Cys Arg Gly Leu Lys Asn Lys Thr Ala
        65   70

gttcttctct tcaccaataa atgctgatta acaagaaaaa aaaaaaaaaa aaaa   298

<210> 4
<211> 74
<212> PRT
<213> Taenia solium

<400> 4

Phe Val Val Ala Val Ser Ala Glu Lys Asn Lys Pro Lys Cys Asp Ala
1   5   10   15

Asn Ser Thr Lys Lys Glu Ile Glu Tyr Ile His Asn Trp Phe Phe His
                20   25   30

Asp Asp Pro Ile Gly Lys Gln Ile Ala Gln Leu Ala Lys Asp Trp Asn
            35   40   45

4

Glu Thr Val Gln Glu Ala Lys Gly Lys Phe Trp Ala Ser Leu Ala Glu
    50   55   60

Tyr Cys Arg Gly Leu Lys Asn Lys Thr Ala
65   70

<210>   5
<211>   294
<212>   DNA
<213>   Taenia solium

<220>
<221>   CDS
<222>   (3)..(221)
<223>

<400>   5
tt ttc gta gtg gcg gtg tcg gcc gag gaa act aaa cca gag gac gtg   47
   Phe Val Val Ala Val Ser Ala Glu Glu Thr Lys Pro Glu Asp Val
   1   5   10   15

gta aag aat att aag aaa ggg atg gaa gtt gtc tac aaa ttt ttc tac   95
Val Lys Asn Ile Lys Lys Gly Met Glu Val Val Tyr Lys Phe Phe Tyr
                20   25   30

gaa gac ccg ttg gga aag aaa ata gct caa ctc gca aag gac tgg aag   143
Glu Asp Pro Leu Gly Lys Lys Ile Ala Gln Leu Ala Lys Asp Trp Lys
            35   40   45

gaa gca atg ttg gaa gcc aga agc aaa gtg cgg gcg tca ctg gct gag   191
Glu Ala Met Leu Glu Ala Arg Ser Lys Val Arg Ala Ser Leu Ala Glu
        50   55   60

tac atc aga ggt ctc aag aac gaa gct gct taacttgtca actttcatgc   241
Tyr Ile Arg Gly Leu Lys Asn Glu Ala Ala
    65   70

gttcttctct tcactaataa atgctcatta ataagaaaaa aaaaaaaaaa aaa   294

<210>   6
<211>   73
<212>   PRT
<213>   Taenia solium

<400>   6

Phe Val Val Ala Val Ser Ala Glu Glu Thr Lys Pro Glu Asp Val Val
1   5   10   15

Lys Asn Ile Lys Lys Gly Met Glu Val Val Tyr Lys Phe Phe Tyr Glu

5

Asp Pro Leu Gly Lys Lys Ile Ala Gln Leu Ala Lys Asp Trp Lys Glu
        35   40   45

Ala Met Leu Glu Ala Arg Ser Lys Val Arg Ala Ser Leu Ala Glu Tyr
        50   55   60

Ile Arg Gly Leu Lys Asn Glu Ala Ala
65   70

<210> 7
<211> 6
<212> PRT
<213> Taenia solium

<400> 7

Ile Ala Gln Leu Ala Lys
1   5

<210> 8
<211> 24
<212> PRT
<213> Taenia solium

<220>
<221> variant
<222> (7)..(8)
<223> Amino acid at position 7 may also be valine

<220>
<221> site
<222> (21)..(22)
<223> Asparagine at position 21 is an amino acid insertion

<220>
<221> variant
<222> (14)..(15)
<223> Amino acid at position 14 may also be glycine

<220>
<221> variant
<222> (18)..(19)
<223> Amino acid at position 18 may also be valine

<220>

<221> variant
<222> (19)..(20)
<223> Amino acid at position 19 may also be histidine

<220>
<221> variant
<222> (20)..(21)
<223> Amino acid at position 20 may also be arginine

<400> 8

Lys Asn Lys Pro Lys Asp Asp Ala Ala Ser Thr Lys Lys Glu Ile Glu
1   5   10   15

Tyr Ile Trp His Asn Phe Phe Phe
            20

<210> 9
<211> 13
<212> PRT
<213> Taenia solium

<220>
<221> variant
<222> (5)..(6)
<223> Amino acid at position 5 may also be isoleucine

<220>
<221> variant
<222> (12)..(13)
<223> Amino acid at position 12 may also be aspartic acid

<220>
<221> variant
<222> (7)..(9)
<223> Amino acid at position 7 may also be asparagine

<220>
<221> site
<222> (8)..(9)
<223> Tryptophan at position 8 is an amino acid insertion

<400> 9

Gly Ile Glu Tyr Val His Glu Trp Phe Phe His Glu Asp
1   5   10